DRAFT MEETING MINUTES
SENATE BILL 325 RULEMAKING COMMITTEE
Tuesday, October 18th 2016
2:00pm to 4:00pm
Metcalf Building
1520 E. Sixth Ave, Helena, MT 59620

PRESENT

Committee Members Present:
Jay Bodner
Barbara Chilcott
Adam Haight
Art Hayes (Phone)
Derf Johnson (Phone)
Tammy Johnson (Phone)
Brenda Lindlief-Hall (Phone)
Peggy Trenk

Montana Department of Environmental Quality Staff Members Present
Myla Kelly
Timmie Smart
Amy Steinmetz
Mike Suplee

Members of the Public:
Lisa Kusnierz (EPA)
Tonya Fish (EPA-Phone)
Vicki Marquis (Phone)
Alan Olson (Phone)

Ms. Myla Kelly called the meeting to order at 2:03 pm. The meeting commenced with introductions followed by a re-cap of the September 19th meeting. Ms. Kelly spoke of the few, relatively minor changes that were made to the rule language and guidance document for Part 2 for the variance. It was agreed they looked good and could be set aside for now. Ms. Kelly noted that the latest draft versions will be posted on the website and that comments are always welcome. Ms. Kelly said this brings the group to the circular and the rule language for Part 1 and how the group discussed keeping it simple, that it contains the nuts and bolts of the performance-based method, and that this brought up a couple of questions to discuss. Before moving on in the meeting, Ms. Kelly asked if the minutes had been read if anyone had any questions regarding them. There were no questions and the minutes will be posted to the website.

Next, Ms. Steinmetz discussed the questions stemming from the last meeting, one regarding the Alaska Rule. She said that when EPA's talking about the performance-based approach in the federal register, there are a couple of lines that talk about the need for public participation for each criterion that comes out of a performance-based method. Ms. Steinmetz said that DEQ is waiting to hear back from EPA headquarters on what that means due to recent changes to water quality standards from 2015.
Ms. Steinmetz moved to Wade Steere's question regarding what happens to the anti-backsliding regulations if we change these criteria. Ms. Lisa Kusnierz from EPA explained how it would work. Under

the anti-backsliding regulations, Ms. Kusnierz said there are certain exceptions allowed, and changes in water quality standards such as site-specific criteria is something that was contemplated and considered an exception, as long as it's consistent with the state's nondegradation requirements. Ms. Kusnierz will send an email to Ms. Steinmetz that directs the group to this language. Ms. Tammy Johnson would like DEQ to explain what it means to be consistent with the nondegradation rules. Ms. Steinmetz answered that DEQ knows they are going to have to work hard on how they are going to implement these criteria using nondegradation. The way the nondegradation rules are currently structured there is nothing that speaks of site-specific criteria based on natural or a non-anthropogenic condition. Ms. Steinmetz said at this point DEQ can't say what that would look like but one of the things they are working on.

Ms. Johnson clarified that there are exceptions allowed at the federal level that contemplate these kinds of changes as exceptions, but the state rule doesn't contemplate these exceptions. Ms. Steinmetz said not yet, but it will, that one of the things they'll have to have as part of the performance based approaches is how nondegradation will be applied. Ms. Steinmetz continued saying when setting site-specific criteria based on a non-anthropogenic condition there will not be a lot of assimilative capacity so DEQ won't be looking at a big buffer in a waterbody. Ms. Johnson said so any new entry source subject to nondegradation is going to have a difficult time gaining exception for non-anthropogenic conditions of the water and are adding to the condition. Ms. Tonya Fish from EPA said that in general terms, usually when you're contemplating criteria based on a natural condition you're in a situation where there likely isn't a lot of assimilative capacity because you're already exceeding the current standards. Ms. Fish said the unknown here, making it difficult to answer Ms. Johnson's question, is where you're going to set the criteria based on natural conditions. Then how is that criterion going to relate to attainment or non-attainment. Ms. Fish said hopefully you'll be setting the criterion at a place where you can attain that criterion, which in that situation you're not going to have an assimilative capacity and looking at a an analysis for a high quality water. Ms. Fish said you'll be looking at the protection of existing uses which would be like tier 1 anti-degradation, which is much different than a tier 2. Ms. Myla Kelly said that the non-degradation component will have to be worked into the circular, but it might be useful to put into writing, in a general way, how our current anti-degradation rules will work with a performance-based method.

Next, Ms. Kelly asked if there were any comments or questions on the Part 1 draft rule that was talked about in the September meeting. Ms. Kelly reminded the work group that the major component of the rule language is the definition of non-anthropogenic condition and the definition of a performance-based method. Ms. Peggy Trenk wanted to confirm that under New Rule Section 3, becoming effective under the public review process and that we're trying to understand what that public review process is. Ms. Kelly said yes, that DEQ is waiting to get a little more clarification from EPA headquarters on whether the public process means just posting it publicly, sending out a notice, or an actual public process review. Ms. Trenk asked if it will still have to go back through the Board. Ms. Kelly thinks that the public participation of this part will be a lighter version than going through the board. Ms. Fish concurred, saying that the question she asked to headquarters was that in the last reg revisions they make some clarifications about when public hearings are required. She said the Alaska rule predates all of this and her understanding is that a public hearing would be required at the time that the performance- based procedure was adopted, but not after that. So each individual application of developing numbers from that process would not be subject to a public hearing. She's waiting for clarification on this.

Next, Ms. Steinmetz reminded the group about feedback they would like on where their groups see the biggest benefit to the state in which performance based method or approach to tackle first. Ms.

Steinmetz referred to what Mr. Haight said at an earlier meeting, where the intent of this legislation was Otter Creek, so it makes sense to start with EC/SAR. There have been internal DEQ conversations, as well as with EPA regarding concerns that it may be too complicated to start with EC/SAR. Ms. Steinmetz asked for the group's feedback. Ms. Kelly added that they spoke with the permitting and assessment sections for their opinion and at the top of their list is iron, EC/SAR, arsenic and aluminum. Mr. Haight consulted with his members and agreed to start with something less complicated like arsenic. Ms. Trenk said her group also chooses arsenic. Ms. Barbara Chilcott asked if that wasn't already far along, like in the Yellowstone River. Ms. Kelly said yes, this is a priority project for DEQ in standards and referred to Ms. Schaar's presentation on the demonstration of natural for arsenic on the Yellowstone which started 2 years ago and is rather far along. Ms. Kelly said that an initial demonstration has been given to EPA and that there is no question that there are naturally elevated levels of arsenic on the Yellowstone, as well as the Madison. She said the next step is to figure out what to do with that information: do we set a new use? Do we set site-specific criteria? Ms. Kelly asked Dr. Mike Suplee if he wanted to discuss why arsenic might not be applicable to SB325. He said that the Yellowstone River is such a unique case and well along in analysis that it wouldn't add value to pursue arsenic. Dr. Suplee believes it would be better to focus on other parameters that are less clear and not as clear to implement. Ms. Kelly added that the question is with the mass load balance equation and loading—does it lend itself better to a performance-based criteria or a site-specific criterion?

Mr. Jay Bodner asked if they see any arsenic issues in other waterbodies outside of the Yellowstone and the Madison. Dr. Suplee said yes, he has asked the TMDL (Total Maximum Daily Load) group what they see as problematic and there are arsenic issues that aren't tied to Yellowstone Park. He added that it's not completely clear where those cases are, and that the big ones for permittees are along the Yellowstone. Ms. Kelly said that there are high levels of arsenic in groundwater, but not sure how that interplays with surface water.

Mr. Bodner asked about reports DEQ has seen on iron and aluminum. Dr. Suplee referred to the presentation on iron during July's meeting and that it was determined natural on their reference site data. He said that these data also include the iron levels seen at those sites, where in some regions the iron was much higher than the standard of 1000 micrograms per liter. Dr. Suplee said that as a model, once you formulate the tactics to use and the sideboards put on reference data, it would lend itself to any other parameter you would use reference data for. Dr. Suplee said it's coarser and less specific than the modeling approach used on EC/SAR. He added that you have to work over a broader landscape, that it doesn't work on a narrowly defined watershed because the reference sites you have to make a comparison to drops down to one or two sites. Dr. Suplee said you start to wonder if this is enough data, and if it's representative. Ms. Kelly said that DEQ did not hear of iron being an issue with permittees. Dr. Suplee said no, that it's primarily a 303d list assessment issue. Most of the TMDLs written for iron deal exclusively with nonpoint sources.

Ms. Johnson asked about selenium. Dr. Suplee thought you can use the reference-site approach for it if there are good data sets for it, but he is not sure there is. Dr. Suplee is also not sure about selenium modeling. Ms. Steinmetz added that what she has heard from DEQ and conversations with committee members is that it's not as widespread as arsenic or iron. She said there may be some limited cases where it will make more sense to use a site specific criterion more than a performance-based approach that can be used in a lot different watersheds or stream segments. Ms. Johnson said she is still in favor of arsenic because it's still not clear on how DEQ is going to change permit limits for those dealing with natural arsenic conditions. Ms. Kelly agreed, saying DEQ has not gotten to that point as far as a policy decision. Ms. Johnson said that at the end of the day, we have a statute that says the Department can

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not apply a standard that is more stringent than non-anthropogenic, but we don't know what kind of methodology we would need to make these determinations to set a standard. Ms. Johnson pointed out that with arsenic we have a great deal of data, where a lot of work and science has gone into, but we still don't know what the end result will be. She said in some ways that is the purpose of SB325.

Ms. Kelly asked Ms. Brenda Lindlief-Hall and Mr. Art Hayes for their constituent's response. Mr. Hayes said arsenic because it affects a lot of people in Montana. Ms. Johnson said her members need to see how this will roll out because they are so geographically dispersed, that there is selenium in one area, aluminum in another. Ms. Kelly asked if they would like to see how it plays out on a landscape basis. Ms. Johnson wondered how you would go about setting a performance based method on something like arsenic, which is fairly straightforward and affects a broader landscape than some of the other constituents. She asked if iron is the most prolific. Ms. Kelly responded yes, but that some waterbodies can be falsely listed for iron that is actually natural. She said that iron has not come back as something that affects permittees. Ms. Johnson agreed that iron is a little easier to manage, and that she's in favor of using arsenic as the case study.

Ms. Chilcott asked about aluminum. Ms. Kelly said that DEQ's standard is a total dissolved criteria vs. a total recoverable, which is opposite of the national recommended water quality criteria from EPA. Ms. Fish said this is correct, that the concern regarding protectiveness is the coagulation and suffocation at the gill sites. Ms. Fish's understanding is that EPA's position would be that the state's aluminum criteria are currently not protective because of the form. Ms. Kelly said that for the other metals DEQ does have a total recoverable standard criteria and EPA has a national recommended water quality criteria of total dissolved, so Montana is opposite there, as well. Ms. Kelly thinks for these reasons aluminum would not be a good one to lead with.

Ms. Kelly thanked the group for talking to their constituents and said that DEQ will discuss options with EPA and make a decision shortly.

Next, Ms. Kelly moved to an outline of what the circular will look like for Part 1 of DEQ-14 which is the performance-based method. Ms. Steinmetz walked the group through what it will look like and has more detail added since originally viewed by the group. She said the circular will become rule. Part A is the general instruction on what you will need to develop a performance based method. Ms. Steinmetz moved to Part B, which is where you adopt the methods. Whichever parameter you start with, it goes here.

Ms. Steinmetz explained Part A: the document's intent, explains the performance-based method. She moved to the EPA's Tudor Davies memo, which came before the Alaska Rule, which established the 3 things required to do the performance-based method:

1) A definition of natural background consistent with EPA's - excludes human caused sources.
2) A provision that site-specific criteria may be set equal to natural background (see MCA 75-5-222)
3) A procedure for determining natural background, or alternatively, a reference in water quality standards to another document describing the binding procedure that will be used.

Ms. Steinmetz moved to the next section that defines anthropogenic and this section would refer to the definition that DEQ ends up adopting in the rule. Ms. Steinmetz said the next piece in the introduction would talk about the acceptable ways to come up with site-specific criteria:

1. Collect the data needed from a stream to come up with site-specific criteria for that location only. This is acceptable and in statute already.
2. Or, the performance-based method, which gives DEQ the authority through the rules that they have been developing.

Next, Ms. Steinmetz covered the background questions to determine applicability of site specific criteria for a waterbody, which is important if there are other things that can or should be done instead

1. Are the water quality standards met in the waterbody?
   If yes, then site specific criteria are not appropriate.
   If no:
   a. Could the current standards be met with cleanup or in the absence of anthropogenic sources?
      If yes, then site specific criteria are not appropriate.

   b. Are the designated uses appropriate for the stream? Ms. Steinmetz thought that in most cases the answer will be no or sort of. She explained these will require closer scrutiny if the uses are appropriate or a designation of other higher attainable uses for that waterbody. This goes in conjunction with developing site specific criteria or applying performance based method.

      If no, then a Use Attainability Analysis (UAA) should be conducted prior to or concurrent with development of site specific numeric water quality criteria.

   c. Do the standards fit within the non-anthropogenic distribution of values? (i.e., would simple changes to the standards in the form of a more appropriate duration and frequency be appropriate rather than a change in magnitude?) Ms. Steinmetz said she was not sure if the group wanted to keep this.

      If yes, then consider adjusting the water quality criteria by changing only the frequency and/or distribution.

Ms. Steinmetz moved onto the data needs.

1. All beneficial uses of the waterbody(ies) must be clearly described.
   A performance-based approach will ultimately derive water quality criteria based on the nonanthropogenic condition of a waterbody. However, the number selected must be protective of the most sensitive designated use.

2. Parameter concentration and flow data collected must reflect seasonal and temporal variability within the waterbody.

   There may be a seasonal component to the most sensitive uses in a water body, whether the most sensitive use is aquatic life, agriculture, recreation, or another use. Samples collected from the water body must be representative of seasonal fluctuations.

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3. Parameter concentration and flow data collection points must be sufficiently spaced to appropriately represent the spatial boundaries of the waterbody or waterbodies of concern and fully characterize the conditions within the waterbody or waterbodies.

   Determine availability of data and differences in values along the stream. If more data is necessary, lay out requirements for sampling. Sufficient data should be collected to determine if only a portion of the water body needs site specific criteria or if multiple segments will require different site specific criteria.

4. All potential anthropogenic contributions of the parameters must be described.

If necessary, a study plan must be developed for collection and analysis of data described above.

1. Develop data collection approach
   - Spatial
   - Temporal
   - Quality Assurance

   Collect data as described in study plan
2. Develop data analysis approach

   Analyze data as described in study plan

Demonstration of non-anthropogenic

The non-anthropogenic condition of a waterbody may be determined through modeling, comparison to an appropriate reference site, mass balance loading, or other methods determined appropriate by the department and the board. The study plan should describe collection of sufficient data and analysis of that data to determine the non-anthropogenic condition of the parameter in the water body. Acceptable methods of determining the non-anthropogenic condition of a waterbody include modeling, a reference stream approach, mass balance modeling, and other methods approved by DEQ and the Board of Environmental Review.

Selection of a criterion

Site-specific criteria calculations will be based only on the non-anthropogenic condition of the waterbody, excluding all contributions from anthropogenic sources. Beneficial use protection will be considered when determining an appropriate method of calculating the site-specific criteria.

Implementation

The performance-based method must include, in addition to data needs and a specific calculation to derive site-specific criteria, specific procedures for implementation of the resulting water quality criteria including provisions that ensure protection of downstream water quality standards.
Implementation in the following must be described

- Beneficial use assessments
- Effluent limit calculations
- Total maximum daily load calculations
- Remediation requirements
- Other activities as appropriate

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Ms. Kelly referred to an earlier comment how in this initial performance based methodology section, there should be a general discussion about nondegradation will fit in with both Part A and Part B.

Ms. Kelly next spoke about the timeline and the task of a full presentation of Part 1 of the Rulemaking Package. She said DEQ is not there yet, but maybe only 2 or 3 months off. Ms. Kelly believes that once the parameter to lead with is decided, DEQ will make some quick strides.

The discussion moved to the next meeting, which is scheduled for Tuesday, November 15th. Ms. Kelly said that DEQ will make the parameter decision by that time and let the group know by email. She said DEQ may schedule a conference call before then.

Ms. Steinmetz said she'll send out a draft of the Circular DEQ-14 Performance-based Methods and Methodology. Ms. Kelly said DEQ will have a revised version at the next meeting. Ms. Trenk asked if any other state has developed a performance based methodology that's been adopted. Ms. Fish said the only state that has is Wyoming, but the state has never implemented it. It was for derivation of ambient-based criteria for their affluent dominated streams. This is where the discharge is creating a habitat for aquatic life and Wyoming is trying to figure out how to attain a healthy aquatic life in this situation and what those criteria look like.

Ms. Kelly moved back to the meeting schedule and designated Monday, December 12th for that month.

The meeting adjourned at 3:00 pm.

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